

Objections to the Drawings

Page 10, line 1 of the specification has been amended to refer to Fig. 3.

Page 10, line 11 of the specification has been amended to delete the reference number 120.

Page 9, line 21, has been amended to delete the reference to the planar horizontal surface.

Proposed Figs. 7 and 8 have been added.

Rejections under 35 USC 112

Figs. 7 and 8 have been added to the specification. Hose and wire connections such as those utilized in the instant invention for remotely mounting the radiator and fan are well known in the art, and therefore it is believed that a detailed description is not needed.

Claim 1 has been amended to clarify the "frame" belongs to the large vehicle.

The Claims have been amended to provide antecedent basis for terms utilized therein, and are believed to particularly point out and distinctly claim the applicant's invention.

Rejections under 35 USC 103

The Examiner has asserted that Claims 1, 3, 10-12, 14 and 16 of the instant invention are unpatentable over Mellum et al. in view of Barnhardt et al. and Kennedy. The Examiner's position is respectfully traversed.

Mellum et al. teaches an auxiliary heating and air conditioning unit for use with a vehicle, typically a truck. The truck has a cab and a sleeper to which the auxiliary power unit provides auxiliary air conditioning and heating. The Mellum unit includes an engine having a vertically reciprocating engine and a radiator mounted internal to the enclosure. The engine and internal radiator are provided with valving adapted to direct the water heated by the vertically reciprocating engine to various parts of the truck to provide primarily to the driving and sleeping areas. Mellum makes no disclosure or suggestion of removing the radiator from the enclosure to allow a more compact enclosure. In fact, Mellum's auxiliary unit includes a complete air conditioning and heating unit in addition to the vertically reciprocating engine. This construction would require a considerable amount of space when compared to the instant invention, which concentrates on constructing a very compact generator unit.

Barnhardt et al. teaches a combination battery box and air tank retainer wherein a portion of the apparatus is constructed to function as a step. Barnhardt makes no disclosure or suggestion

utilizing the battery box to house a low profile generator set. Moreover because the Barnhardt enclosure does not include any provisions for circulating air and/or exhaust in and out of the enclosure the enclosure would not function for the intended purpose of housing a generator set.

Kennedy the inventor of the instant invention teaches a generator support bracket for use in positioning a generator in close proximity to a horizontally oriented internal combustion engine. The support bracket replaces the engine inspection cover and allows for the direct coupling of a generator to the support bracket, and thus the engine. The direct coupling provides unit rigidity eliminating the need for an independent baseplate and allows for the use of a timing belt without the need for belt adjustment, as commonly used in engine/generator combinations. Kennedy makes no disclosure or suggestion of any enclosure.

The Examiner has provided no motivation to combine Mellum, Barnhardt and Kennedy as set forth in the instant rejection. Since none of the disclosed inventions suggest mounting a generator set having a horizontally reciprocating diesel engine inside of an enclosure in combination with a remotely mounted radiator and/or fan for cooling the generator set. Absent any motivation found within the prior art, it is respectfully submitted that the Examiner's combination of references can only be deemed hindsight reconstruction utilizing the instant disclosure, which is of course

prohibited.

The Examiner has asserted that Claims 7-9 and 19-21 of the instant invention are unpatentable over Mellum et al. in view of Barnhardt et al. and Kennedy and further in view of Mullican. The Examiner's position is respectfully traversed.

Mellum et al. teaches an auxiliary heating and air conditioning unit for use with a vehicle, typically a truck. The truck has a cab and a sleeper to which the auxiliary power unit provides auxiliary air conditioning and heating. The Mellum unit includes an engine having a vertically reciprocating engine and a radiator mounted internal to the enclosure. The engine and internal radiator are provided with valving adapted to direct the water heated by the vertically reciprocating engine to various parts of the truck to provide primarily to the driving and sleeping areas. Mellum makes no disclosure or suggestion of removing the radiator from the enclosure to allow a more compact enclosure. In fact, Mellum's auxiliary unit includes a complete air conditioning and heating unit in addition to the vertically reciprocating engine. This construction would require a considerable amount of space when compared to the instant invention, which concentrates on constructing a very compact generator unit.

Barnhardt et al. teaches a combination battery box and air tank retainer wherein a portion of the apparatus is constructed to

function as a step. Barnhardt makes no disclosure or suggestion utilizing the battery box to house a low profile generator set. Moreover because the Barnhardt enclosure does not include any provisions for circulating air and/or exhaust in and out of the enclosure the enclosure would not function for the intended purpose of housing a generator set.

Kennedy the inventor of the instant invention teaches a generator support bracket for use in positioning a generator in close proximity to a horizontally oriented internal combustion engine. The support bracket replaces the engine inspection cover and allows for the direct coupling of a generator to the support bracket, and thus the engine. The direct coupling provides unit rigidity eliminating the need for an independent baseplate and allows for the use of a timing belt without the need for belt adjustment, as commonly used in engine/generator combinations. Kennedy makes no disclosure or suggestion of any enclosure.

Mullican teaches an anti-theft, portable clamp-on storage container for mounting in the load bed of a pickup truck comprises relatively movable top and bottom container sections which close to form an enclosure for goods. A screw clamp having an inverted U-shaped fixed jaw and a screw actuated movable jaw cooperable therewith is mounted with the inverted U-shaped fixed jaw supported exteriorly of the container bottom section and with the screw actuator for the movable jaw extending inside of the container. The

fixed jaw is positioned to slide down over one of the side or end panels of the pickup truck load bed when the container is lowered into the floor of the load bed from above. A handle for turning the screw actuator is provided on the end of the screw actuator which is inside of the container so that the screw actuator can only be turned when the container is open. A lock is provided to lock the container closed so that the screw clamp once clamped to the side or end panel of the load bed cannot be loosened without unlocking and opening the container. The Mullican apparatus is constructed for use with pickup trucks. The enclosure is too large for use under the door of a tractor type truck. Moreover, the enclosure requires support for the bottom surface for loads, which is provided by the bed of the pickup truck.

The Examiner has provided no motivation to combine Mellum, Barnhardt, Kennedy and Mullican as set forth in the instant rejection. Since none of the disclosed inventions suggest mounting a generator set having a horizontally reciprocating diesel engine inside of an enclosure having a hingeable portion for access to the generator in combination with a remotely mounted radiator and/or fan for cooling the generator set. Absent any motivation found within the prior art, it is respectfully submitted that the Examiner's combination of references can only be deemed hindsight reconstruction utilizing the instant disclosure, which is of course prohibited.

The Examiner has asserted that Claim 4 of the instant invention is unpatentable over Mellum et al. in view of Barnhardt et al. and Kennedy and further in view of Shin Caterpillar. The Examiner's position is respectfully traversed.

Mellum et al. teaches an auxiliary heating and air conditioning unit for use with a vehicle, typically a truck. The truck has a cab and a sleeper to which the auxiliary power unit provides auxiliary air conditioning and heating. The Mellum unit includes an engine having a vertically reciprocating engine and a radiator mounted internal to the enclosure. The engine and internal radiator are provided with valving adapted to direct the water heated by the vertically reciprocating engine to various parts of the truck to provide primarily to the driving and sleeping areas. Mellum makes no disclosure or suggestion of removing the radiator from the enclosure to allow a more compact enclosure. In fact, Mellum's auxiliary unit includes a complete air conditioning and heating unit in addition to the vertically reciprocating engine. This construction would require a considerable amount of space when compared to the instant invention, which concentrates on constructing a very compact generator unit.

Barnhardt et al. teaches a combination battery box and air tank retainer wherein a portion of the apparatus is constructed to function as a step. Barnhardt makes no disclosure or suggestion utilizing the battery box to house a low profile generator set.

Moreover because the Barnhardt enclosure does not include any provisions for circulating air and/or exhaust in and out of the enclosure the enclosure would not function for the intended purpose of housing a generator set.

Kennedy the inventor of the instant invention teaches a generator support bracket for use in positioning a generator in close proximity to a horizontally oriented internal combustion engine. The support bracket replaces the engine inspection cover and allows for the direct coupling of a generator to the support bracket, and thus the engine. The direct coupling provides unit rigidity eliminating the need for an independent baseplate and allows for the use of a timing belt without the need for belt adjustment, as commonly used in engine/generator combinations. Kennedy makes no disclosure or suggestion of any enclosure.

Shin Caterpillar teaches an enclosure which is divided into compartments having separate ventilation systems. The enclosure 11 is constructed to enclose the engine 13 and all of its ancillary components including the radiator 25, fan 26, fan motor 27 and generator 24. As illustrated, the area within the enclosure 11 is divided into at least two distinct compartments. The first compartment 12 encloses the engine 13 in a manner which isolates the engine from the ancillary components. The first compartment 12 is ventilated with exhaust gas pressure from the engine 13. The exhaust gasses exiting orifice 17 cooperate with the enclosure 11

to draw air through vents 22 constructed in casing wall 11b. The second compartment encloses the ancillary components associated with the engine and utilizes the fan 26 and fan motor 27 to draw air through the radiator 25 discharging the air through vents 31. Because this device is illustrated with the radiator 25, fan 26 and fan motor 27 mounted in a separate compartment of the same enclosure it cannot be considered analogous to the instant invention. Moreover, there is no disclosure or suggestion of mounting the radiator, fan and motor in a location remote from or outside of the enclosure as is suggested in the instant invention. Still further, the Shin Caterpillar device appears to be aimed at large construction type machinery where the space saving qualities of the instant invention may not be needed or appreciated. The instant invention is aimed at providing a combination low profile generator and enclosure therefore which can be mounted in smaller and more remote locations than would be possible with Shin Caterpillar. In addition, there is no disclosure or suggestion by Shin Caterpillar of utilizing a engine having at least one horizontal cylinder as is suggested in the instant invention. The horizontal cylinder allows lower profiles than are possible with vertical or angled cylinders such as those illustrated in Shin Caterpillar.

The Examiner has provided no motivation to combine Mellum, Barnhardt, Kennedy and Shin Caterpillar as set forth in the instant

rejection. Since none of the disclosed inventions suggest mounting a generator set having a horizontally reciprocating diesel engine inside of an enclosure in combination with a remotely mounted radiator and/or fan for cooling the generator set. Absent any motivation found within the prior art, it is respectfully submitted that the Examiner's combination of references can only be deemed hindsight reconstruction utilizing the instant disclosure, which is of course prohibited.

The Examiner has asserted that Claims 6, 13, 18 and 22 of the instant invention are unpatentable over Mellum et al. in view of Barnhardt et al. and Kennedy and further in view of Shin Caterpillar. The Examiner's position is respectfully traversed.

Mellum et al. teaches an auxiliary heating and air conditioning unit for use with a vehicle, typically a truck. The truck has a cab and a sleeper to which the auxiliary power unit provides auxiliary air conditioning and heating. The Mellum unit includes an engine having a vertically reciprocating engine and a radiator mounted internal to the enclosure. The engine and internal radiator are provided with valving adapted to direct the water heated by the vertically reciprocating engine to various parts of the truck to provide primarily to the driving and sleeping areas. Mellum makes no disclosure or suggestion of removing the radiator from the enclosure to allow a more compact enclosure. In

fact, Mellum's auxiliary unit includes a complete air conditioning and heating unit in addition to the vertically reciprocating engine. This construction would require a considerable amount of space when compared to the instant invention, which concentrates on constructing a very compact generator unit.

Barnhardt et al. teaches a combination battery box and air tank retainer wherein a portion of the apparatus is constructed to function as a step. Barnhardt makes no disclosure or suggestion utilizing the battery box to house a low profile generator set. Moreover because the Barnhardt enclosure does not include any provisions for circulating air and/or exhaust in and out of the enclosure the enclosure would not function for the intended purpose of housing a generator set.

Kennedy the inventor of the instant invention teaches a generator support bracket for use in positioning a generator in close proximity to a horizontally oriented internal combustion engine. The support bracket replaces the engine inspection cover and allows for the direct coupling of a generator to the support bracket, and thus the engine. The direct coupling provides unit rigidity eliminating the need for an independent baseplate and allows for the use of a timing belt without the need for belt adjustment, as commonly used in engine/generator combinations. Kennedy makes no disclosure or suggestion of any enclosure.

Shin Caterpillar teaches an enclosure which is divided into

compartments having separate ventilation systems. The enclosure 11 is constructed to enclose the engine 13 and all of its ancillary components including the radiator 25, fan 26, fan motor 27 and generator 24. As illustrated, the area within the enclosure 11 is divided into at least two distinct compartments. The first compartment 12 encloses the engine 13 in a manner which isolates the engine from the ancillary components. The first compartment 12 is ventilated with exhaust gas pressure from the engine 13. The exhaust gasses exiting orifice 17 cooperate with the enclosure 11 to draw air through vents 22 constructed in casing wall 11b. The second compartment encloses the ancillary components associated with the engine and utilizes the fan 26 and fan motor 27 to draw air through the radiator 25 discharging the air through vents 31. Because this device is illustrated with the radiator 25, fan 26 and fan motor 27 mounted in a separate compartment of the same enclosure it cannot be considered analogous to the instant invention. Moreover, there is no disclosure or suggestion of mounting the radiator, fan and motor in a location remote from or outside of the enclosure as is suggested in the instant invention. Still further, the Shin Caterpillar device appears to be aimed at large construction type machinery where the space saving qualities of the instant invention may not be needed or appreciated. The instant invention is aimed at providing a combination low profile generator and enclosure therefore which can be mounted in smaller

and more remote locations than would be possible with Shin Caterpillar. In addition, there is no disclosure or suggestion by Shin Caterpillar of utilizing a engine having at least one horizontal cylinder as is suggested in the instant invention. The horizontal cylinder allows lower profiles than are possible with vertical or angled cylinders such as those illustrated in Shin Caterpillar.

Ylonen et al teaches a combination diesel engine and generator for home use the engine and generator being mounted in a thermally and acoustically insulated housing provided with ports for cooling intake air and exhaust air and an aperture for an exhaust pipe. The engine is mounted in the housing substantially vertically over the generator, the engine having a substantially horizontal crankshaft which is situated substantially in the same vertical plane in which a substantially horizontal generator shaft is situated. A fuel tank for the engine is provided which constitutes at least a part of a wall of the housing to provide lateral stiffening reinforcement therefore. The ports for cooling intake air and exhaust air as well as the aperture for the exhaust pipe are provided in a common housing wall with the intake air port situated below the exhaust air port which in turn is situated below the aperture for receiving the exhaust pipe. A ventilation module is mounted on the common housing wall in which the air ports and exhaust pipe aperture are provided, the ventilation module including apertures formed therein

through which intake and exhaust air are adapted to pass. Louvers are provided in the ventilation module for opening and closing the apertures and a fitting is provided for connection to the exhaust pipe received in the exhaust pipe aperture. The Ylonen apparatus includes the fan and radiator both within the enclosure. There is no disclosure or suggestion mounting a radiator or fan remote from the enclosure.

The Examiner has provided no motivation to combine Mellum, Barnhardt, Kennedy, Shin Caterpillar and Ylonen as set forth in the instant rejection. Since none of the disclosed inventions suggest mounting a generator set having a horizontally reciprocating diesel engine inside of an enclosure in combination with a remotely mounted radiator and/or fan for cooling the generator set. Absent any motivation found within the prior art, it is respectfully submitted that the Examiner's combination of references can only be deemed hindsight reconstruction utilizing the instant disclosure, which is of course prohibited.

The Examiner has asserted that Claims 2, 5 and 17 of the instant invention are unpatentable over Mellum et al. in view of Barnhardt et al., Kennedy and Shin Caterpillar in view of In re Boesch. The Examiner's position is respectfully traversed.

Mellum et al. teaches an auxiliary heating and air conditioning unit for use with a vehicle, typically a truck. The

truck has a cab and a sleeper to which the auxiliary power unit provides auxiliary air conditioning and heating. The Mellum unit includes an engine having a vertically reciprocating engine and a radiator mounted internal to the enclosure. The engine and internal radiator are provided with valving adapted to direct the water heated by the vertically reciprocating engine to various parts of the truck to provide primarily to the driving and sleeping areas. Mellum makes no disclosure or suggestion of removing the radiator from the enclosure to allow a more compact enclosure. In fact, Mellum's auxiliary unit includes a complete air conditioning and heating unit in addition to the vertically reciprocating engine. This construction would require a considerable amount of space when compared to the instant invention, which concentrates on constructing a very compact generator unit.

Barnhardt et al. teaches a combination battery box and air tank retainer wherein a portion of the apparatus is constructed to function as a step. Barnhardt makes no disclosure or suggestion utilizing the battery box to house a low profile generator set. Moreover because the Barnhardt enclosure does not include any provisions for circulating air and/or exhaust in and out of the enclosure the enclosure would not function for the intended purpose of housing a generator set.

Kennedy the inventor of the instant invention teaches a generator support bracket for use in positioning a generator in

close proximity to a horizontally oriented internal combustion engine. The support bracket replaces the engine inspection cover and allows for the direct coupling of a generator to the support bracket, and thus the engine. The direct coupling provides unit rigidity eliminating the need for an independent baseplate and allows for the use of a timing belt without the need for belt adjustment, as commonly used in engine/generator combinations. Kennedy makes no disclosure or suggestion of any enclosure.

Shin Caterpillar teaches an enclosure which is divided into compartments having separate ventilation systems. The enclosure 11 is constructed to enclose the engine 13 and all of its ancillary components including the radiator 25, fan 26, fan motor 27 and generator 24. As illustrated, the area within the enclosure 11 is divided into at least two distinct compartments. The first compartment 12 encloses the engine 13 in a manner which isolates the engine from the ancillary components. The first compartment 12 is ventilated with exhaust gas pressure from the engine 13. The exhaust gasses exiting orifice 17 cooperate with the enclosure 11 to draw air through vents 22 constructed in casing wall 11b. The second compartment encloses the ancillary components associated with the engine and utilizes the fan 26 and fan motor 27 to draw air through the radiator 25 discharging the air through vents 31. Because this device is illustrated with the radiator 25, fan 26 and fan motor 27 mounted in a separate compartment of the same

enclosure it cannot be considered analogous to the instant invention. Moreover, there is no disclosure or suggestion of mounting the radiator, fan and motor in a location remote from or outside of the enclosure as is suggested in the instant invention. Still further, the Shin Caterpillar device appears to be aimed at large construction type machinery where the space saving qualities of the instant invention may not be needed or appreciated. The instant invention is aimed at providing a combination low profile generator and enclosure therefore which can be mounted in smaller and more remote locations than would be possible with Shin Caterpillar. In addition, there is no disclosure or suggestion by Shin Caterpillar of utilizing a engine having at least one horizontal cylinder as is suggested in the instant invention. The horizontal cylinder allows lower profiles than are possible with vertical or angled cylinders such as those illustrated in Shin Caterpillar.

The Examiner has provided no motivation to combine Mellum, Barnhardt, Kennedy and Shin Caterpillar as set forth in the instant rejection. Since none of the disclosed inventions suggest mounting a generator set having a horizontally reciprocating diesel engine inside of an enclosure in combination with a remotely mounted radiator and/or fan for cooling the generator set. Absent any motivation found within the prior art, it is respectfully submitted that the Examiner's combination of references can only be deemed

hindsight reconstruction utilizing the instant disclosure, which is of course prohibited.

CONCLUSION

In light of the foregoing remarks, amendments to the specification and amendments to the claims, it is respectfully submitted that the Examiner will now find the claims of the application allowable. Favorable reconsideration of the application is courteously requested. Should there be any remaining issues which can be resolved via an Examiner's Amendment, the Examiner is urged to call the undersigned in order to expedite the prosecution of this application

Respectfully submitted,



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